Claim 14 stands rejected, under 35 USC §102(b), as being anticipated by Heese et al. (US 6,194,805). Applicants respectfully traverse the rejection.

The Final Rejection proposes that Heese discloses in Fig. 1 a two-phase SRM (Final Rejection section 2, lines 3-4). Applicants disagree.

Heese discloses five different exemplary embodiments of a reluctance motor (Heese col. 2, lines 51-52). Heese further discloses that from these five embodiments, a skilled artisan may choose between embodiments to be operated in three-phase and embodiments to be operated in four-phase (col. 2, lines 52-56). The five exemplary embodiments are respectively illustrated by Figs. 1-5 (see col. 3, lines 14-16, col. 4, lines 32-35 and 51-54, and col. 5, lines 5-8 and 22-24). Heese's Fig. 1 necessarily illustrates a three-phase motor for the following reasons.

Heese discloses in Fig. 1 a stator having nine poles. Of these nine poles, three are first stator poles 201 that have a width corresponding to that of the rotor poles (Heese col. 3, lines 37-40). A pair of second stator poles 202 correspond to each first stator pole 201 and are disposed at ±120 degree angles from the corresponding first stator pole 201. Each second stator pole has half the width of a first stator pole (col. 3, lines 63-66). Upon supplying power to an excitation coil 211 wound on one

of the first stator poles 201 and to respective excitation coils 212 wound on the corresponding pair of second stator poles 202, the excited second stator poles 202 each exert a force on a rotor 300 that is half the magnitude of the force exerted by the excited first stator pole 201 (col. 4, lines 2-6). As may be determined by examination of Fig. 1 and as disclosed by Heese in column 2, lines 9-15, the three forces have a triangular configuration. Since there are three first stator poles 201 that each cooperate with a unique corresponding pair of second stator poles 202 and Heese discloses that the forces induced on the rotor by each of the three sets of corresponding first and second stator poles have a triangular configuration (see Heese col. 2, lines 9-15), it necessarily follows that the reluctance motor disclosed by Heese in Fig. 1 is a three-phase motor.

This conclusion is supported by Heese's statement that only three excitation coils 211 and 212 are shown in Fig. 1 in association with the three effective pairs of rotor poles 301 and stator poles 201, 202 conveying flux during the illustrated excitation phase (col. 4, lines 23-28). The other stator poles are <u>likewise</u> associated with coils (col. 4, lines 28-29).

The enclosed Exhibits 1-3 are annotated copies of Heese's Fig. 1 illustrating the corresponding flux paths for each of the three excitation phases creating motive force in Heese's motor.

Exhibit 1 illustrates the orientation of the rotor and stator poles in the initial position illustrated in Heese's Fig. 1. Exhibit 2 illustrates the orientation of the rotor and stator poles after the rotor has rotated 20 degrees counter-clockwise from the initial position illustrated in Exhibit 1, and Exhibit 3 illustrates the orientation of the rotor and stator poles after the rotor has rotated 20 degrees counter-clockwise from the position illustrated in Exhibit 2.

Since Heese's rotor has six poles with a uniform spacing of 60 degrees, Exhibit 1 illustrates the orientation of the rotor and stator poles for every 60-degree rotation of the rotor from the initial position. Similarly, Exhibits 2 and 3 also illustrate the orientation of the rotor and stator poles for every 60 degree rotation of the rotor from the respective positions of the rotor illustrated by these Exhibits.

An inspection of the two flux paths illustrated in Exhibit 1 reveals that the forces induced on the rotor by the flux have a triangular configuration, as described by Heese in column 2, lines 9-15. The same is true for the excitation phases illustrated in Exhibits 2 and 3. As a result, Exhibits 1-3 respectively illustrate the three excitation phases for Heese's motor and each excitation phase produces forces on the rotor having a triangular configuration, thereby overcoming the

problems Heese describes for prior art motors that do not exert triangular forces on the rotor (see Heese's Background of the Invention discussion).

In summary, Exhibits 1-3 illustrate the orientations of the rotor and stator poles providing the maximum flux density for each of the three phases producing motive force in Heese's motor. Therefore, Heese's Fig. 1 illustrates a three-phase motor as indicated by Heese in column 2, lines 53-57, rather than a two-phase SRM as proposed in the Final Rejection.

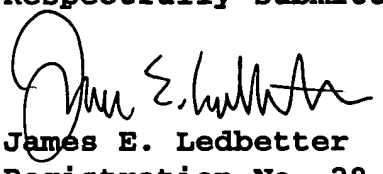
In accordance with the discussion above, Applicants submit that Heese does not anticipate the subject matter defined by claim 14. Therefore, allowance of claim 14 is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone

the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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JEL/DWW/att

James E. Ledbetter
Registration No. 28,732

Attorney Docket No. L1081.04102

STEVENS DAVIS, MILLER & MOSHER, L.L.P.
1615 L Street, N.W., Suite 850
P.O. Box 34387
Washington, D.C. 20043-4387
Telephone: (202) 785-0100
Facsimile: (202) 408-5200